

Serial No. 10/725,378
Docket No. YOR920030321US1 (YOR.483)

REMARKS

Claims 1-33 are all the claims presently pending in the application.

It is noted that the claim amendments, if any, are made only for more particularly pointing out the invention, and not for distinguishing the invention over the prior art, narrowing the claims or for any statutory requirements of patentability. Further, Applicant specifically states that no amendment to any claim herein should be construed as a disclaimer of any interest in or right to an equivalent of any element or feature of the amended claim.

Claims 1-33 stand rejected under 35 U.S.C. § 101 as directed to non-statutory subject matter. Claims 1-33 stand rejected under 35 U.S.C. § 102(a) as anticipated by the inventors' IEEE presentation for a conference dated December 9, 2002, wherein some aspects of the present invention were published.

These rejections are respectfully traversed in the following discussion.

I. THE CLAIMED INVENTION

The claimed invention, as exemplarily defined in independent claim 1, is directed to a method of processing an inductive learning model for a dataset of examples. The dataset is divided into a plurality of subsets of data. An estimated learning model for the dataset is then developed by developing a learning model for a first subset of the plurality of subsets.

Conventional methods, as described at line 21 of page 3 through line 6 of page 4, of learning model methods for a database require that the entire database be evaluated before the effects of hypothetical parameters for a test model are known. This process can take many hours (or days) and be costly, so that it can be prohibitive to spend so much effort in the development of an optimal model to perform the intended task.

In contrast, the present invention provides a method to develop an inductive learning model in much shorter time, including an estimate of the accuracy of the model as currently developed and an estimated cost to develop a complete model of the entire database.

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II. THE 35 USC §101 REJECTION

Claims 1-33 stand rejected under 35 U.S.C. §101 as allegedly directed to non-statutory subject matter.

Applicants are not quite certain what exactly the Examiner is attempting to assert in this rejection. However, in an attempt to expedite prosecution, Applicants submit the following responses.

Relative to the Examiner's characterization that an "... *inductive learning method by itself has no practical application*", Applicants submit that the present invention provides a method that greatly reduces the amount of time and costs to develop a learning model for a large database. Moreover, as explained in lines 1-3 of page 2, the non-limiting applications for the types of learning models that the present invention is directed toward include: fraud detection, intrusion detection, charity donation, security and exchange, loan approval, animation, car design, and many more.

Because of these very real-world applications, the present invention is clearly directed toward practical applications. It is noted that statutory subject matter is a question relative to the invention as a whole, including the description in the specification.

On page 3 of the Office Action the Examiner alleges that the claims are overly broad because the Examiner considers that the claims are broader than the disclosure, thereby providing, as best understood, that the claimed invention therefore lacks practical application. Applicants respectfully disagree with this position, since the present invention should not be considered as a practical application only if limited to those examples, such as fraud detection, etc., exemplarily listed in the specification. The result of the present invention is its method of providing an inductive learning model in much shorter time and does not reside in a listing of the types of specific problems for which these types of inductive learning models can be applied.

Also on page 3, the Examiner alleges: "*Claims that recites (sic) a method or system that computes a (sic) inductive algorithm which solely calculates a mathematical response without a purpose or function is not statutory.*"

In response to this statement, as best understood by Applicants and taking independent claim 1 as an example, Applicants submit that the purpose of the claimed invention is clearly

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described in the claim itself as providing an inductive learning model indicative of the entire dataset by providing a model for only a subset of the dataset. This method reduces considerably the amount of time to estimate a model for the entire dataset.

Applicants further submit that the implication in the rejection, that claim 1 "... *computes a[n] inductive algorithm which solely calculates a mathematical response without a purpose or function* ...", is incorrect. This claim, as typical of all the independent claims, does not recite an inductive algorithm. Rather, the claim is clearly describing a process wherein a model is developed for the entire dataset by developing a model for a subset of the data. This shortening of the model development allows the user to determine, within a short time and at much less cost than conventional methods, whether it is desirable to spend the time and effort to develop a model for the entire dataset.

If the estimated accuracy is acceptable, the use of dataset can proceed without the extensive testing of conventional methods. This reduction in time and expense clearly provides the practical application of the present invention.

In view of the foregoing, the Examiner is respectfully requested to reconsider and withdraw this rejection.

III. THE PRIOR ART REJECTION

The Examiner alleges that Applicants' own publication dated December, 2002, anticipates the present invention.

In response, Applicants first submit that the IEEE publication in December, 2002, relates to a conference in Japan, held on December 9-12, as indicated by the attachment conference announcement. Therefore, to the extent that the Examiner relies upon this document, it has to be considered as effective on December 9, 2002, and would be disqualified as a prior art reference against the present invention because the December 3, 2003, filing date of the present application precedes the one-year protection period for using an inventor's own publication against himself.

Second, Applicants submit that the present invention also includes aspects beyond those presented in the December 9-12 conference. Therefore, even if this document were qualified as a prior art reference, Applicant submits that there are elements of the claimed invention that are

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not taught or suggest by this earlier publication.

Therefore, the Examiner is respectfully requested to withdraw this rejection.

IV. FORMAL MATTERS AND CONCLUSION

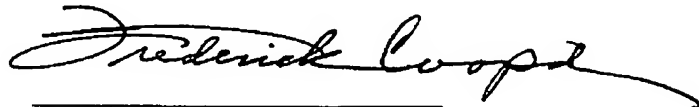
In view of the foregoing, Applicant submits that claims 1-33, all the claims presently pending in the application, are patentably distinct over the prior art of record and are in condition for allowance. The Examiner is respectfully requested to pass the above application to issue at the earliest possible time.

Should the Examiner find the application to be other than in condition for allowance, the Examiner is requested to contact the undersigned at the local telephone number listed below to discuss any other changes deemed necessary in a telephonic or personal interview.

The Commissioner is hereby authorized to charge any deficiency in fees or to credit any overpayment in fees to Assignee's Deposit Account No. 50-0510.

Respectfully Submitted,

Date: 11/29/06



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ICDM '02)

The 2002 IEEE International Conference on Data Mining



Sponsored by the IEEE Computer
Society

Maebashi TERRSA, Maebashi City, Japan
December 9 - 12, 2002

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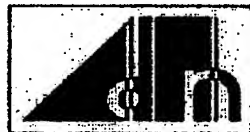
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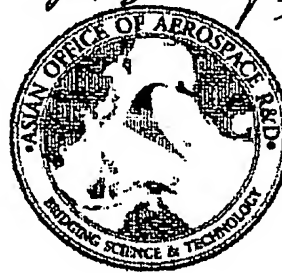
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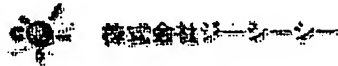
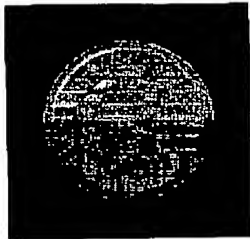
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